

DIVERSITECH CORP
PRECAST, SOLID CONCRETE CONCRETE PADS FOR MECHANICAL UNIT INSTALLATION
IN CONDITIONS UP TO 175 MPH / EXPOSURE C IN MIAMI DADE & THE HVHZ

GENERAL PERFORMANCE EVALUATION REPORT (FOR AT-GRADE APPLICATIONS ONLY)

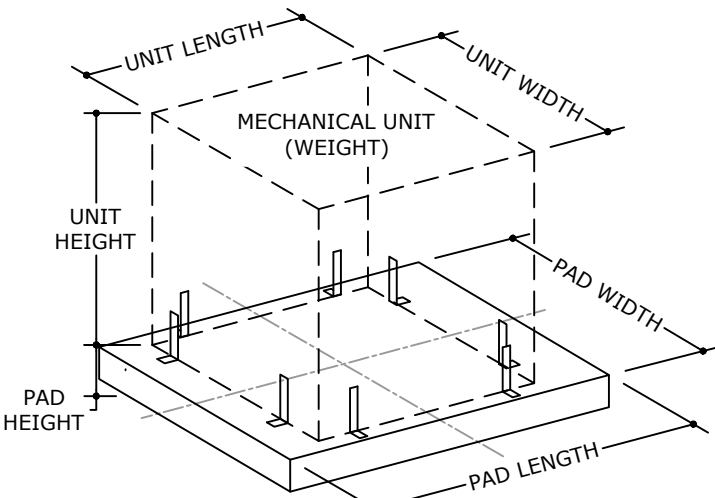
HVHZ / NON-HVHZ - FLORIDA STATE APPROVAL - FL# 41704.3

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.



CERTIFIED FOR USE
WITH PADS BY
DIVERSITECH ONLY

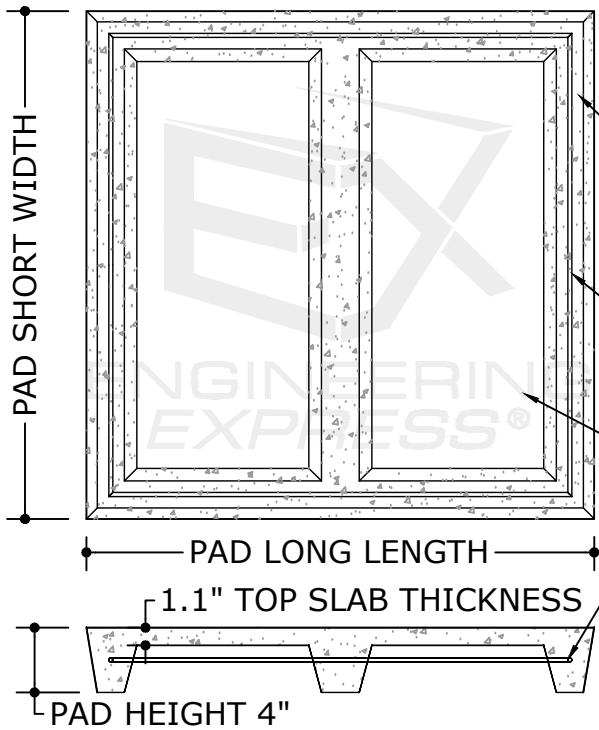
MECHANICAL UNIT MANUFACTURER'S SPECIFICATIONS
TO BE SUBMITTED WITH THIS PLAN
(SEE SCHEDULE FOR MINIMUM WEIGHT REQUIRED)



PAD & UNIT
ISOMETRIC VIEW

CONCRETE PAD MAY HAVE
ROUNDED SIDES & CORNERS

TOTAL WIDTH & LENGTH MAY
TAPER UP TO 2" FROM BASE TO
TOP OF SLAB ON EACH SIDE
(ANCHOR EDGE DISTANCE TO BE
MAINTAINED PER SCHEDULE)



CONCRETE MIX TO
CONTAIN 0.1%
FIBERMESH
REINFORCEMENT
PER CUBIC YARD

#2 REBAR
REINFORCEMENT
AROUND
PERIMETER OF PAD

CONCRETE PAD
WITH VOIDS

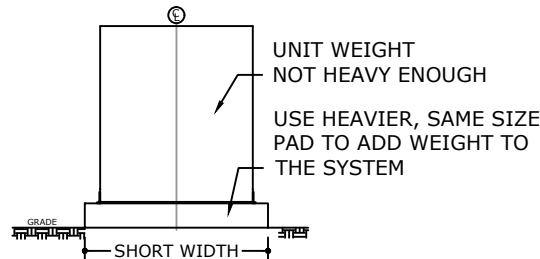
#2 REBAR
REINFORCEMENT
AROUND
PERIMETER OF PAD

ANCHOR TO PAD CONNECTION SCHEDULE:

SUBSTRATE	DESCRIPTION
PRECAST CONCRETE PAD: (3000 PSI MIN. AT 28 DAYS)	USE (8) 1/4" BLUE / WHITE, OR SS CONCRETE TAPCON (2 ON EACH SIDE OF MECHANICAL UNIT). INSTALL VIA INTEGRATED MOUNTING HOLES OR USING DIVERSITECH HC-1 OR TDC-4/8/12 HURRICANE CLIPS. MAINTAIN 1" MIN EMBEDMENT & 2.5" CONCRETE EDGE DISTANCE. ANCHORS TO BE RATED TO A MINIMUM OF 700 LB PULLOUT & 900 LB SHEAR (ULTIMATE). FOLLOW MANUFACTURER INSTRUCTIONS FOR ANCHOR INSTALLATION.

ADDITIONAL SUPPORT DIRECTIVES:

ADDITIONAL PAD WEIGHT DIRECTIVE



ONLY DIVERSITECH H-, HT-, OR HMD-SERIES PADS ARE CERTIFIED AS APPLICABLE ALTERNATIVE PADS

ADDITIONAL PAD WEIGHT DIRECTIVE:

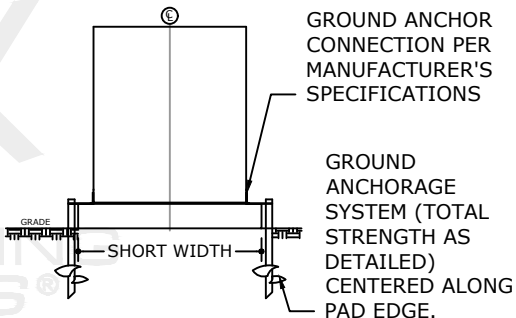
THE REQUIRED MINIMUM WEIGHTS LISTED IN THE PAD SELECTION TABLE REFER THE WEIGHT OF THE MECHANICAL UNIT ONLY (THE WEIGHT OF THE PRECAST CONCRETE PAD LISTED HAS ALREADY BEEN CONSIDERED IN THE CALCULATION). FOR UNITS NOT MEETING THE MINIMUM WEIGHT REQUIREMENTS, A HEAVIER, EQUIVALENT PAD (PRODUCED BY DIVERSITECH) MAY BE USED TO ADD WEIGHT TO THE SYSTEM.

EXAMPLE SITUATION:
FOR A UNIT 25" X 31" X 30" X 300 LBS, A HMD3636-4 PAD IS LARGE ENOUGH FOR THE INSTALLATION. HOWEVER, THIS CONDITION REQUIRES 400 LBS OF UNIT WEIGHT (THE UNIT IS 100 LBS TOO LIGHT).

THE HMD3636-4 PAD IS 220 LBS, SO AN EQUIVALENTLY SIZED 36 X 36 PAD WHICH IS 100 LB HEAVIER MAY BE EQUIVALENTLY USED (THIS PAD MAY BE SLIGHTLY TALLER, UP TO 6" MAX HEIGHT). DUE TO THIS 100 ADDITIONAL LBS OF PAD WEIGHT, THE HEAVIER PAD SHALL SUFFICIENT FOR USE

300 LBS + 100 LBS = 400 LBS >= 400 LBS (MINIMUM FROM TABLE) - OK!

GROUND ANCHORAGE DIRECTIVE



TALBE 2: DIVERSITECH PAD SIZES
FOR HIGH WIND CONDITIONS
(UP TO 175 MPH / EXPOSURE C
IN MIAMI DADE & THE HVHZ)
REFER SHEET 2 FOR PAD SELECTION TABLE

DIVERSITECH PRECAST CONCRETE PADS MODEL ID, SIZE & WEIGHT				
PAD ID	LENGTH	WIDTH	HEIGHT	WEIGHT
HMD1840-4	18 IN	40 IN	4 IN	196 LB
HMD2436-4	24 IN	36 IN	4 IN	147 LB
HMD2448-4	24 IN	48 IN	4 IN	254 LB
HMD3030-4	30 IN	30 IN	4 IN	155 LB
HMD3636-4	36 IN	36 IN	4 IN	220 LB
HMD3648-4	36 IN	48 IN	4 IN	306 LB
HMD3842-4	38 IN	42 IN	4 IN	277 LB
HMD4040-4	40 IN	40 IN	4 IN	318 LB

OPTIONAL GROUND ANCHORS:

FOR UNITS NOT MEETING THE WEIGHT REQUIREMENTS DETAILED IN TABLE 2, ADDITIONAL GROUND ANCHORAGE MAY BE INCLUDED IN THE INSTALLATION IN PLACE OF ADDITIONAL WEIGHT. ADDING GROUND ANCHORS ON EACH SIDE OF THE SYSTEM AS SHOWN SHALL BE SUFFICIENT FOR INSTALLATION OF ANY PAD / UNIT NOT MARKED "N/A" ON TABLE 1 (PADS MARKED "N/A" ARE NOT LARGE / WIDE ENOUGH FOR THE UNIT).

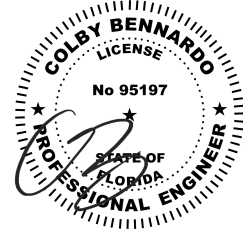
GROUND ANCHORAGE SHALL CONFORM TO AND BE INSTALLED PER THE FOLLOWING REQUIREMENTS:

- GROUND ANCHOR PULL TEST STRENGTH (ON EACH LONG SIDE) MUST BE 1/2 OF THE DIFFERENCE BETWEEN THE REQUIRED & ACTUAL UNIT WEIGHTS
EX: REQUIRED UNIT WEIGHT = 1000 LB
ACTUAL UNIT WEIGHT = 400 LB
ANCHOR STRENGTH REQUIRED = (1000 LB - 400 LB)/2 = 300 LB (ANCHOR STRENGTH REQUIRED ON EACH LONG SIDE)
- ANCHOR STRENGTH SHALL BE AS PROVIDED BY PULL TEST STRENGTH RATING (BY OTHERS) FOR THE GROUND CONDITION PRESENT.
- MULTIPLE ANCHORS MAY BE UTILIZED ALONG EACH SIDE OF THE SYSTEM SO THAT THE CUMULATIVE PULL TEST STRENGTHS SUM TO THE CALCULATED REQUIRED STRENGTH.
- GROUND ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS. ANCHORS MAY BE FASTENED TO THE PRECAST SLAB OR MECHANICAL UNIT AS REQUIRED.
- FOR ANCHORAGE TO EXISTING CONCRETE, ADDITIONAL SITE-SPECIFIC ENGINEERING IS REQUIRED.

NOTE REGARDING USE OF
THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN FLORIDA ONLY. USE OF THIS EVALUATION REQUIRES A REVIEW & CERTIFICATION BY A LOCAL DESIGN PROFESSIONAL WHO SHALL BE RESPONSIBLE FOR THE PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE AT ENGINEERINGEXPRESS.COM/QUOTE FOR ASSISTANCE WITH YOUR PROJECT-SPECIFIC NEEDS & FOR ADAPTATION & CERTIFICATION OF THIS DOCUMENT OUTSIDE OF FLORIDA

COLBY BENNARDO, PE
PE# 95197 CA# 9885



Digitally signed by
Colby Bennardo,
PE
Date: 2024.12.06
13:16:48-05'00'

DESIGN NOTES

- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) AND ASCE 7.
- POSITIVE, NEGATIVE, AND LATERAL DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
- UPLIFT HAS BEEN CONSIDERED IN THE DESIGN CALCULATIONS. UPLIFT CALCULATED AS THE MAX OF 1.5/1.9 X LATERAL PRESSURE & 0.6 X q_h
- WIND SPEEDS LISTED ARE ULTIMATE (VULT) SPEEDS AS DETAILED IN ASCE 7. LOADING & REACTION VALUES LISTED ARE CALCULATED USING ALLOWABLE STRESS DESIGN (ASD)
- MAXIMUM DIMENSIONS AND WEIGHT OF CONCRETE PAD & GENERATOR UNIT SHALL CONFORM TO SPECIFICATIONS STATED ± 1/2" TOLERANCE.
- THE AREA UNDER CONCRETE SLAB ON GROUND SHALL HAVE ALL VEGETATION, STUMPS, ROOTS, AND FOREIGN MATERIALS REMOVED PRIOR TO INSTALLATION ON COMPACTED SOIL AS VERIFIED BY OTHERS.
- THESE CONCRETE PADS HAVE BEEN DESIGNED FOR A MINIMUM BEARING CAPACITY OF 2,000 PSF AND MINIMUM SUBGRADE MODULUS = 100 PCI. SHOULD OTHER CONDITIONS OR MATERIALS BE ENCOUNTERED, THE ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE WORK.
- SLIDING IS ASSUMED TO BE ADDITIONALLY RESISTED BY MINIMAL EMBEDMENT OF PAD IN GROUND ALONG WITH RESISTANCE FROM CONNECTED CABLING. NOMINAL SLIDING IS NOT ASSUMED A FAILURE CASE IN THIS DESIGN
- CONCRETE MIXTURES SHALL BE DESIGNED TO REACH A COMPRESSIVE STRENGTH OF 3000 PSI IN 72 HOURS.
- ALL MIXING, TRANSPORTING, PLACING, & CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318.
- CONCRETE SHALL BE TYPE I PORTLAND CEMENT MEETING THE REQUIREMENTS OF ASTM C150, AGGREGATES TO MEET ASTM C33. POTABLE WATER SHALL BE USED.
- CONCRETE MIX TO CONTAIN 0.1% FIBERMESH REINFORCEMENT PER CUBIC YARD
- ALL REINFORCEMENT BARS SHALL BE OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO CURRENT REQUIREMENTS OF ASTM A615, GRADE 60 (U.O.N.) ALL WELDED WIRE FABRIC IS TO CONFORM TO ASTM A185 MINIMUM YIELD STRENGTH OF 85 KSI.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- WATER-TIGHTNESS OF EXISTING FINISHES SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL ENSURE THAT ANY REMOVED OR ALTERED WATERPROOFING MEMBRANE IS RESTORED AFTER FABRICATION AND INSTALLATION OF STRUCTURE PROPOSED HEREIN. THIS ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY WATERPROOFING OR LEAKAGE ISSUES WHICH MAY OCCUR AS WATER-TIGHTNESS SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

GENERAL NOTES

- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- THE ROLE OF THIS ENGINEER FOR THIS PROJECT IS THAT OF SPECIALTY ENGINEER AND NOT THE ENGINEER OF RECORD. CONSEQUENTLY, THE ARCHITECT/ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.
- THIS DOCUMENT IS GENERIC AND DOES NOT PERTAIN TO ANY SPECIFIC PROJECT SITE. INFORMATION CONTAINED HEREIN IS BASED ON CONTRACTOR-SUPPLIED DATA AND MEASUREMENTS. ENGINEERING EXPRESS SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY, BUT MUST REMAIN WITHIN THE LIMITATIONS SPECIFIED HEREIN.
- WORK SHALL BE FIELD VERIFIED BY OTHERS PRIOR TO CONSTRUCTION. ENGINEERING EXPRESS SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO REEVALUATE OUR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS. ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

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DIVERSITECH CORP.

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SOLID CONCRETE - PRECAST CONCRETE PAD
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#41704.3)

DATE	DATE	DATE	DATE	DATE	DATE
10/4/22	8/21/23	12/06/24			
INIT ISSUE (22-55490)	FBC 2023	R2: CONCRETE & REINFORCEMENT			
DRWN	CHKD	CCB	RVN	MLD	CCB

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SCALE: NTS UNLESS NOTED

1 OF 2

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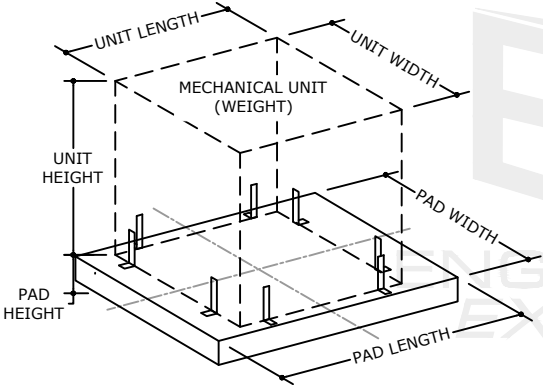
TABLE 1: DIVERSITECH PAD SELECTION - BY MINIMUM ALLOWABLE MECHANICAL UNIT WEIGHT - FOR WIND CONDITIONS: 175 MPH V_{ULT}/ EXPOSURE C
NOTE: FOR USE IN MIAMI DADE & THE HVHZ, UPLIFT HAS BEEN CONSIDERED IN THESE CALCULATIONS AS 1.5/1.9 X LATERAL PRESSURE
DUE TO THIS UPLIFT PRESSURE CONSIDERED, RESULTANT LOADING APPLIED VARIES BETWEEN PAD & UNIT SIZES AS DETAILED BELOW

UNIT MAX DIMENSIONS			PAD MODEL NUMBER / MINIMUM ALLOWABLE UNIT WEIGHT								LOADING APPLIED															
SHORT LENGTH	LONG WIDTH	UNIT HEIGHT	HMD1840-4	HMD2436-4	HMD2448-4	HMD3030-4	HMD3636-4	HMD3648-4	HMD3842-4	HMD4040-4	HMD1840-4		HMD2436-4		HMD2448-4		HMD3030-4		HMD3636-4		HMD3648-4		HMD3842-4		HMD4040-4	
											LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT	LAT FORCE	OT MOMENT
13 IN	35 IN	20 IN	375 LB	N/A	200 LB	N/A	N/A	35 LB	50 LB	NO MIN	190 LB	260 LB-FT	N/A	N/A	185 LB-FT	275 LB-FT	N/A	N/A	N/A	N/A	215 LB	390 LB-FT	215 LB	400 LB-FT	215 LB	405 LB-FT
		24 IN	560 LB	N/A	340 LB	N/A	N/A	125 LB	140 LB	85 LB	230 LB	345 LB-FT	N/A	N/A	225 LB-FT	360 LB-FT	N/A	N/A	N/A	N/A	285 LB	545 LB-FT	280 LB	550 LB-FT	280 LB	555 LB-FT
		30 IN	895 LB	N/A	595 LB	N/A	N/A	295 LB	300 LB	235 LB	295 LB	495 LB-FT	N/A	N/A	290 LB-FT	510 LB-FT	N/A	N/A	N/A	N/A	345 LB	725 LB-FT	345 LB	730 LB-FT	345 LB	735 LB-FT
		36 IN	1300 LB	N/A	895 LB	N/A	N/A	495 LB	490 LB	415 LB	360 LB	675 LB-FT	N/A	N/A	355 LB-FT	690 LB-FT	N/A	N/A	N/A	N/A	415 LB	815 LB-FT	415 LB	820 LB-FT	415 LB	825 LB-FT
19 IN	24 IN	20 IN	N/A	200 LB	95 LB	145 LB	50 LB	NO MIN	NO MIN	NO MIN	N/A	N/A	120 LB	210 LB-FT	120 LB-FT	210 LB-FT	120 LB	225 LB-FT	115 LB	245 LB-FT	130 LB	280 LB-FT	125 LB	265 LB-FT	145 LB	320 LB-FT
		24 IN	N/A	295 LB	190 LB	220 LB	110 LB	25 LB	45 LB	NO MIN	N/A	N/A	150 LB	270 LB-FT	150 LB-FT	270 LB-FT	145 LB	285 LB-FT	145 LB	300 LB-FT	145 LB	300 LB-FT	145 LB	310 LB-FT	145 LB	320 LB-FT
		30 IN	N/A	470 LB	360 LB	360 LB	225 LB	140 LB	150 LB	95 LB	N/A	N/A	195 LB	375 LB-FT	195 LB-FT	370 LB-FT	190 LB	390 LB-FT	185 LB	405 LB-FT	190 LB	405 LB-FT	185 LB	410 LB-FT	185 LB	415 LB-FT
		36 IN	N/A	675 LB	570 LB	525 LB	365 LB	280 LB	285 LB	220 LB	N/A	N/A	240 LB	495 LB-FT	240 LB-FT	495 LB-FT	235 LB	510 LB-FT	230 LB	530 LB-FT	235 LB	530 LB-FT	230 LB	535 LB-FT	230 LB	540 LB-FT
	31 IN	20 IN	N/A	300 LB	195 LB	N/A	125 LB	40 LB	60 LB	NO MIN	N/A	N/A	155 LB	270 LB-FT	155 LB-FT	270 LB-FT	N/A	N/A	150 LB	315 LB-FT	150 LB	315 LB-FT	150 LB	325 LB-FT	145 LB	320 LB-FT
		24 IN	N/A	425 LB	315 LB	N/A	210 LB	120 LB	135 LB	80 LB	N/A	N/A	195 LB	345 LB-FT	195 LB-FT	345 LB-FT	N/A	N/A	185 LB	390 LB-FT	185 LB	385 LB-FT	185 LB	395 LB-FT	185 LB	400 LB-FT
		30 IN	N/A	645 LB	540 LB	N/A	355 LB	270 LB	275 LB	215 LB	N/A	N/A	250 LB	480 LB-FT	250 LB-FT	480 LB-FT	N/A	N/A	240 LB	520 LB-FT	240 LB	520 LB-FT	240 LB	525 LB-FT	240 LB	535 LB-FT
		36 IN	N/A	915 LB	810 LB	N/A	535 LB	450 LB	445 LB	375 LB	N/A	N/A	310 LB	640 LB-FT	310 LB-FT	640 LB-FT	N/A	N/A	300 LB	680 LB-FT	300 LB	685 LB-FT	295 LB	690 LB-FT	295 LB	695 LB-FT
25 IN	25 IN	20 IN	N/A	N/A	N/A	190 LB	95 LB	NO MIN	30 LB	NO MIN	N/A	N/A	N/A	N/A	N/A	N/A	120 LB	260 LB-FT	115 LB	285 LB-FT	115 LB	285 LB-FT	115 LB	295 LB-FT	125 LB	320 LB-FT
		24 IN	N/A	N/A	N/A	270 LB	160 LB	75 LB	90 LB	40 LB	N/A	N/A	N/A	N/A	N/A	N/A	150 LB	320 LB-FT	145 LB	345 LB-FT	145 LB	345 LB-FT	145 LB	350 LB-FT	145 LB	360 LB-FT
		30 IN	N/A	N/A	N/A	415 LB	280 LB	195 LB	205 LB	145 LB	N/A	N/A	N/A	N/A	N/A	N/A	195 LB	430 LB-FT	190 LB	450 LB-FT	190 LB	455 LB-FT	190 LB	460 LB-FT	185 LB	465 LB-FT
		36 IN	N/A	N/A	N/A	590 LB	425 LB	340 LB	340 LB	275 LB	N/A	N/A	N/A	N/A	N/A	N/A	240 LB	560 LB-FT	235 LB	585 LB-FT	235 LB	585 LB-FT	235 LB	590 LB-FT	230 LB	595 LB-FT
	31 IN	20 IN	N/A	N/A	N/A	N/A	170 LB	85 LB	100 LB	50 LB	N/A	N/A	N/A	N/A	N/A	N/A	145 LB	355 LB-FT	145 LB	355 LB-FT	140 LB	360 LB-FT	140 LB	360 LB-FT	140 LB	370 LB-FT
		24 IN	N/A	N/A	N/A	N/A	250 LB	165 LB	180 LB	125 LB	N/A	N/A	N/A	N/A	N/A	N/A	180 LB	425 LB-FT	180 LB	425 LB-FT	180 LB	425 LB-FT	180 LB	435 LB-FT	175 LB	445 LB-FT
		30 IN	N/A	N/A	N/A	N/A	400 LB	315 LB	320 LB	260 LB	N/A	N/A	N/A	N/A	N/A	N/A	235 LB	560 LB-FT	235 LB	560 LB-FT	235 LB	560 LB-FT	235 LB	570 LB-FT	230 LB	580 LB-FT
		36 IN	N/A	N/A	N/A	N/A	580 LB	495 LB	490 LB	420 LB	N/A	N/A	N/A	N/A	N/A	N/A	290 LB	720 LB-FT	290 LB	725 LB-FT	290 LB	725 LB-FT	290 LB	730 LB-FT	290 LB	740 LB-FT
31 IN	31 IN	30 IN	N/A	N/A	N/A	N/A	445 LB	355 LB	365 LB	300 LB	N/A	N/A	N/A	N/A	N/A	N/A	230 LB	600 LB-FT	230 LB	595 LB-FT	230 LB	595 LB-FT	230 LB	610 LB-FT	225 LB	620 LB-FT
		36 IN	N/A	N/A	N/A	N/A	625 LB	535 LB	535 LB	465 LB	N/A	N/A	N/A	N/A	N/A	N/A	285 LB	765 LB-FT	285 LB	760 LB-FT	285 LB	760 LB-FT	285 LB	775 LB-FT	280 LB	785 LB-FT
		20 IN	N/A	N/A	N/A	N/A	215 LB	125 LB	145 LB	95 LB	N/A	N/A	N/A	N/A	N/A	N/A	140 LB	395 LB-FT	140 LB	390 LB-FT	140 LB	390 LB-FT	140 LB	405 LB-FT	140 LB	415 LB-FT
		24 IN	N/A	N/A	N/A	N/A	295 LB	210 LB	225 LB	170 LB	N/A	N/A	N/A	N/A	N/A	N/A	175 LB	465 LB-FT	175 LB	465 LB-FT	175 LB	465 LB-FT	175 LB	480 LB-FT	175 LB	490 LB-FT
	36 IN	42 IN	N/A	N/A	N/A	N/A	835 LB	745 LB	730 LB	650 LB	N/A	N/A	N/A	N/A	N/A	N/A	345 LB	950 LB-FT	340 LB	950 LB-FT	340 LB	960 LB-FT	340 LB	960 LB-FT	340 LB	970 LB-FT
		20 IN	N/A	N/A	N/A	N/A	195 LB	215 LB	160 LB	160 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	160 LB	455 LB-FT	160 LB	455 LB-FT	160 LB	470 LB-FT	160 LB	480 LB-FT
		24 IN	N/A	N/A	N/A	N/A	290 LB	305 LB	245 LB	245 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200 LB	540 LB-FT	200 LB	540 LB-FT	200 LB	555 LB-FT	200 LB	565 LB-FT
		30 IN	N/A	N/A	N/A	N/A	465 LB	465 LB	400 LB	400 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	265 LB	695 LB-FT	265 LB	695 LB-FT	265 LB	705 LB-FT	260 LB	720 LB-FT
35 IN	35 IN	36 IN	N/A	N/A	N/A	N/A	670 LB	665 LB	590 LB	590 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	330 LB	880 LB-FT	330 LB	880 LB-FT	330 LB	895 LB-FT	325 LB	910 LB-FT
		42 IN	N/A	N/A	N/A	N/A	915 LB	895 LB	810 LB	810 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	395 LB	1100 LB-FT	395 LB	1100 LB-FT	395 LB	1115 LB-FT	395 LB	1130 LB-FT
		32 IN	N/A	N/A	N/A	N/A	N/A	N/A	470 LB	470 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	270 LB	790 LB-FT
		36 IN	N/A	N/A	N/A	N/A	N/A	N/A	595 LB	595 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	310 LB	915 LB-FT
	36 IN	42 IN	N/A	N/A	N/A	N/A	N/A	N/A	810 LB	810 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	375 LB	1130 LB-FT
		48 IN	N/A	N/A	N/A	N/A	N/A	N/A	1055 LB	1055 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	440 LB	1375 LB-FT
		54 IN	N/A	N/A	N/A	N/A	N/A	N/A	1330 LB	1330 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	505 LB	1650 LB-FT
		32 IN	N/A	N/A	N/A	N/A	N/A	N/A	495 LB	495 LB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	280 LB	815 LB-FT

ASCE 7-22 ULT WIND VELOCITY TO ASD DESIGN PRESSURE AT GRADE CONVERSION CHART - HVHZ OR NON HVHZ									
EXAMPLE COUNTY	RISK I		EXPOSURE C		EXPOSURE D		RISK II	EXPOSURE C	
	I	C	D	II	C	D		III, IV	C
FORT MYERS	145 MPH	29.4 PSF	35.6 PSF	160 MPH	35.8 PSF	43.4 PSF	175 MPH	42.8 PSF	51.9 PSF
PALM BEACH	150 MPH	31.5 PSF	38.1 PSF	170 MPH	40.4 PSF	49.0 PSF	180 MPH	45.3 PSF	54.9 PSF
BROWARD	156 MPH	34.0 PSF	41.2 PSF	170 MPH	40.4 PSF	49.0 PSF	180 MPH	45.3 PSF	54.9 PSF
MIAMI-DADE	165 MPH	38.1 PSF	46.1 PSF	175 MPH	42.8 PSF	51.9 PSF	186 MPH	48.4 PSF	58.6 PSF
MONROE	175 MPH	42.8 PSF	51.9 PSF	180 MPH	45.3 PSF	54.9 PSF	200 MPH	55.9 PSF	67.8 PSF
Kz (Exp C/D) (Table 26.10-1) =		0.85	1.03	Kd (Table 26.6-1) =		0.9	G (Section 26.11) =		0.85
Kzt (Section 26.8.2) =		1.0		Ke (Section 26.9) =		1	Cf (Table 29.4-1) =		1.4

ULT WIND VELOCITY TABLE INCLUDES A QUICK REFERENCE OF COMMON FLORIDA CONDITIONS (AT ULTIMATE DESIGN WIND VELOCITIES) & CORRESPONDING DESIGN PRESSURES. FOR SITE-SPECIFIC CONDITIONS, CONSULT LOCAL BUILDING MUNICIPALITY. MAXIMUM DESIGN WIND PRESSURES AT GRADE PER SPECIFIED EXPOSURE REMAIN CONSTANT FOR ANY MAX WIND VELOCITY. FOR SITE-SPECIFIC WIND VELOCITY AND PRESSURE CONVERSIONS, SEE QR LINK PROVIDED.

PAD & UNIT ISOMETRIC VIEW



INSTRUCTIONS FOR HOW TO USE MINIMUM UNIT WEIGHT TABLE:

STEP 1: CONFIRM YOUR SITE'S REQUIRED, MAXIMUM WIND CONDITIONS FOR USE WITH THIS PERFORMANCE EVALUATION (VALID FOR UP TO 175 MPH / EXPOSURE C IN MIAMI & THE HVHZ)

STEP 2: DETERMINE MECHANICAL UNIT'S MAX SIZE. UNIT MAY NOT BE LARGER IN ANY DIMENSION THAN LISTED ON TABLE

STEP 3: FIND WEIGHT OF (EMPTY) MECHANICAL UNIT AS REPORTED BY THE MANUFACTURER

STEP 4: SELECT PAD BASED ON MINIMUM ALLOWABLE WEIGHTS SHOWN BELOW (MECHANICAL UNIT INSTALLED ON PAD MUST BE **HEAVIER** THAN WEIGHT VALUE LISTED)

STEP 5: IF UNIT IS NOT HEAVY ENOUGH, EITHER SELECT A LARGER PAD OR REFER ADDITIONAL SUPPORT DIRECTIVE ON SHEET 1

CELLS MARKED WITH "N/A" REPRESENT UNITS WHICH ARE TOO BIG FOR INSTALLATION ON THE DESIGNATED PAD.

CELLS MARKED WITH "NO MIN" REPRESENT PADS WHICH ARE HEAVY ENOUGH TO SUPPORT A UNIT OF ANY WEIGHT (OF THE DESIGNATED SIZE)

FOR CONDITIONS WHERE UNIT WEIGHT IS NOT SUFFICIENT, ADDITIONAL SUPPORT MAY BE ADDED TO THE SYSTEM BY EITHER INCREASING THE SYSTEM'S PERMANENT WEIGHT OR INCLUDING ADDITIONAL GROUND ANCHORAGE. REFER DIRECTIVES ON SHEET 1 FOR ADDITIONAL INFORMATION.

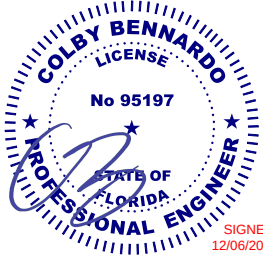
COLBY BENNARDO, PE
PE# 95197 CA# 9885

SPACE RESERVED FOR DIGITAL SEAL INFORMATION

WHEN DIGITALLY SEALED, THIS NOTE SHALL BE FULLY COVERED ON SHEET 1

WHEN PRINTED OR PHYSICALLY SEALED, SEAL OF CERTIFYING ENGINEER, AND DATE OF CERTIFICATION SHALL BE SHOWN TO THE RIGHT.

IN ALL CASES, CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP



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SOLID CONCRETE - PRECAST CONCRETE PAD
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#41704.3)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE (22-55490)	CCB	RWN	10/4/22
FBC 2023	MLD	CCB	8/21/23
R2: CONCRETE & REINFORCEMENT	CCB	CCB	12/06/24

23-61198

SCALE: NTS UNLESS NOTED